Computer Science Semester 2

Course Description

Take your computing skills higher with Computer Science 2. Find out how you can use free software to develop your own applications, with windows, images, buttons, and pzazz! Extend your software skills to create family trees, social studies projects, holiday memories, electronic flashcards, sports team rosters in full color – and so much more!

Build up computer know how and be ready to create great software, and join any conversation about computers, developing software, the internet, big numbers in computing.

You will learn how to create graphical applications using the Python computer programming language, with a little help from one of Python's friends, 'tkinter'. You will design user interfaces with graphic elements that make it easier for the user to interact with the application. You will know how numbers work in computing, and be introduced to the web, and web development.

Prerequisites

Algebra I

Course Materials

Required

- Microsoft Office or Google Docs (See the Minimum Technical Skills and Special Technology Utilized by Students)
- Reliable Internet Access
- Laptop or Desktop (Tablets need Puffin app for internet browsing)
- Adobe Acrobat Reader
- Python software (free download)

Recommended

Course Goals

Upon completion of the course, students will…

- what an applications programming interface (api) is, and …
- how to develop graphical applications using an api
- how numbers are used in computing

- what you need to do to create an interactive web page
- and …. you will have applications you developed by yourself.
- will be in even more of a position to make informed choices about your subsequent computer classes, and how you can use computing to express your own interests and goals.

Units of Instruction

- Unit 1: The Pursuit of Graphicness!
- Unit 2: Map to an App
- Unit 3: I'm Counting on You
- Unit 4: It's a Web of Intrigue
- Unit 5: Analyze That, Can You Speak Computer?

Assignments

The course includes the following assignments:

1. 0 Discussions
2. 20 Dropboxes
3. 6 Quizzes (Includes Unit Test and Final Exam)

Grading / Evaluation

Grading Scheme

Course grades will be determined as follows:

97% or better	A+	77% to 79%	C+
93% to 96%	A	73% to 76%	C
90% to 92%	A -	70% to 72%	C -
87% to 89%	B +	67% to 69%	D+
83% to 86%	B	63% to 66%	D
80% to 82%	B -	60% to 62%	D-
		59% or less	F

Assignment Descriptions and Weightings

The assignments for this course are weighted as follows:

Assignments	Percentage of Final Grade
Course Work (Discussions, Dropboxes and Quizzes)	70%
Final Exam	30%
Total	**100%**

Instructor Contact Response Time

Contact information for the Indiana Online Instructor can be found by clicking on the Course Home link in the navigation menu.

The instructor will respond to student inquiries (email, text, call) **within 24 hours**. Assignments will be graded within 24 hours and grades will be posted.

Information about Final Exam

The Final Exam must be proctored. Final Exams count for 30% of the total grade.

Expectations for Academic Conduct

Student Handbook

It is your responsibility to read the student handbook and contact your instructor if you have any questions.

Acceptable User & Netiquette Policy

The Acceptable Use Policy outlines the guidelines and behaviors that all users (administrators, teachers, students and parents) are expected to follow when participating in the Indiana Online program.

Academic Integrity

Honesty is the Indiana Online policy!

CIPA

The Children's Internet Protection Act (CIPA) is a federal law enacted by Congress to address concerns
about access to offensive content over the Internet on school and library computers.

Assistance for Students with Disabilities

Indiana Online supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, such inaccessible web content, or the use of non-captioned videos and podcasts, reasonable accommodations can be arranged.

Learn more about the accessibility features in Indiana Online's Learning Management System (LMS), Desire2Learn.

Suggested Assistive Technologies

- Screen Readers: VoiceOver and NVDA
- Chrome Extensions: ChromeVox and Speakit!

Minimum Technical Skills and Special Technology Utilized by Students

This course is totally online. All instructional content and interaction takes place over the internet. In addition to baseline word processing skills and sending/receiving email with attachments, students will be expected to search the internet and upload / download files. In addition, students may need one or more of these technology plug-ins to access course materials and content.

Students should have access to Microsoft Office or have an established Google account to work on course documents.

Technical Questions? Please contact the Indiana Online Helpdesk.